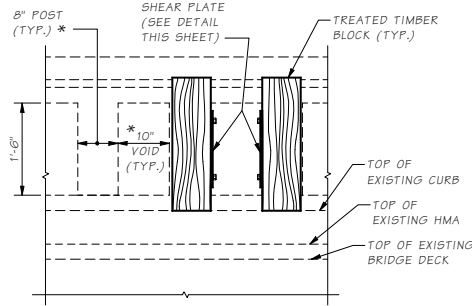
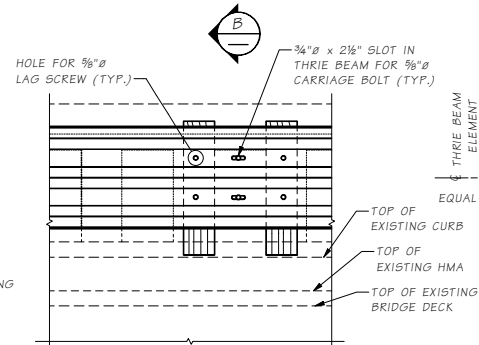


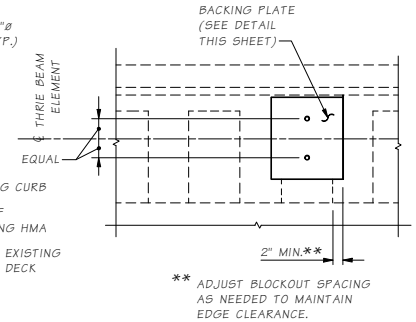
ELEVATION
RAIL END POST



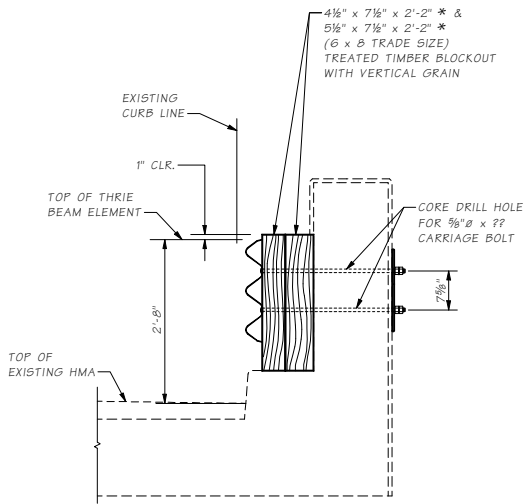
BALUSTER POST
INSIDE ELEVATION
THRIE BEAM NOT SHOWN



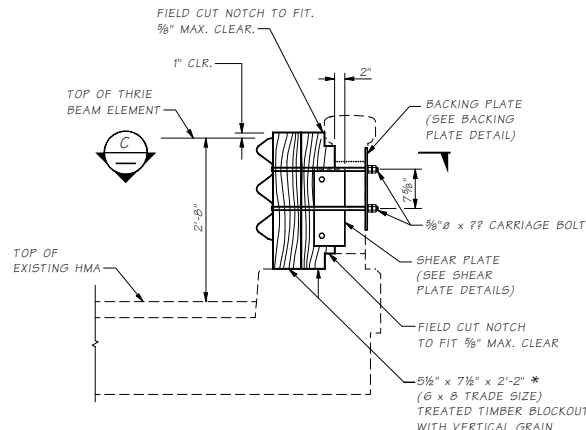
BALUSTER POST
INSIDE ELEVATION
THRIE BEAM SHOWN



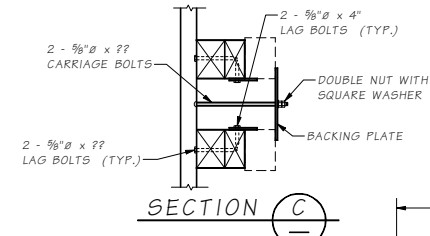
BALUSTER POST
OUTSIDE ELEVATION
THRIE BEAM NOT SHOWN



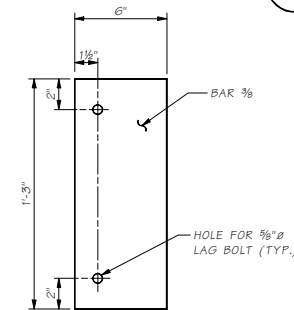
SECTION (A)
REQUIRED
@ ?? LOCATIONS



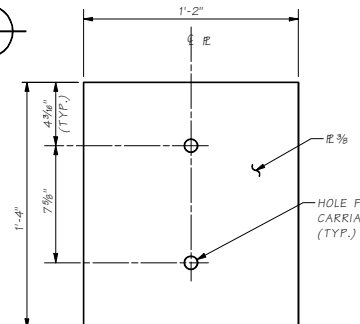
SECTION (B)
?? ASSEMBLIES



SECTION (C)



SHEAR PLATE



BACKING PLATE
DETAIL

* SEE GENERAL NOTE NO. 5 ON BRIDGE SHEET NO. 1.

Bridge Design Engr.	M:\STANDARDS\Traffic Barriers\Rail Retrofit\BALUSTER STANDARD.MAN	WORK NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor		10	WASH.			
Designed By						
Checked By						
Detailed By						
Bridge Projects Engr.						
Prelim Plan By						
Architect/Specialist						
DATE	REVISION	BY	APPD			

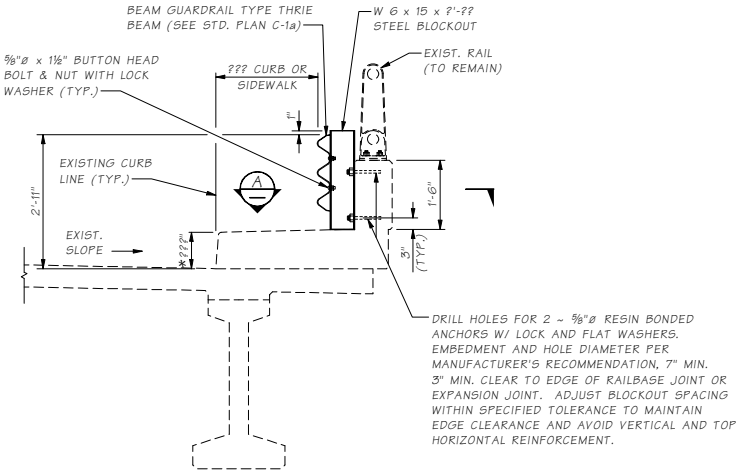
BRIDGE
AND
STRUCTURES
OFFICE



THRIE BEAM RETROFIT
CONCRETE BALUSTER

BRIDGE SHEET NO.
SHEET
OF
SHEETS

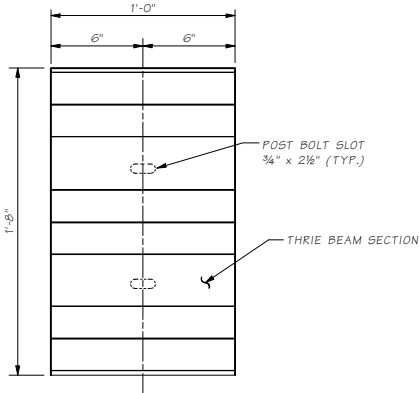
10.4-A1-1



TYPICAL SECTION
AT STEEL BLOCKOUT

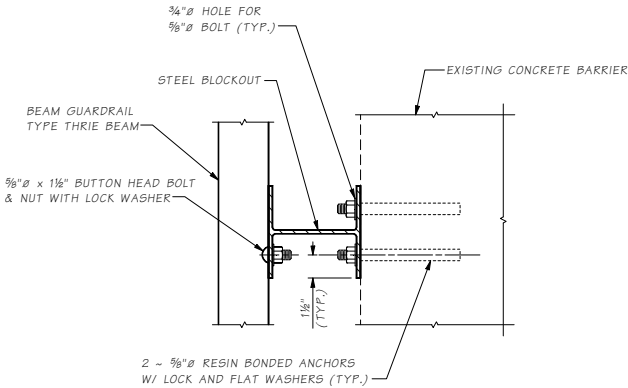
(??? ASSEMBLIES REQUIRED)

* SEE GENERAL NOTE NO. 5 ON BRIDGE SHEET NO. 1.



BACKUP PLATE

BACKUP PLATE REQUIRED AT POST WHERE NO THRIE BEAM GUARDRAIL SPLICE OCCURS.



SECTION A

10.4-A1-2

SHEET 0

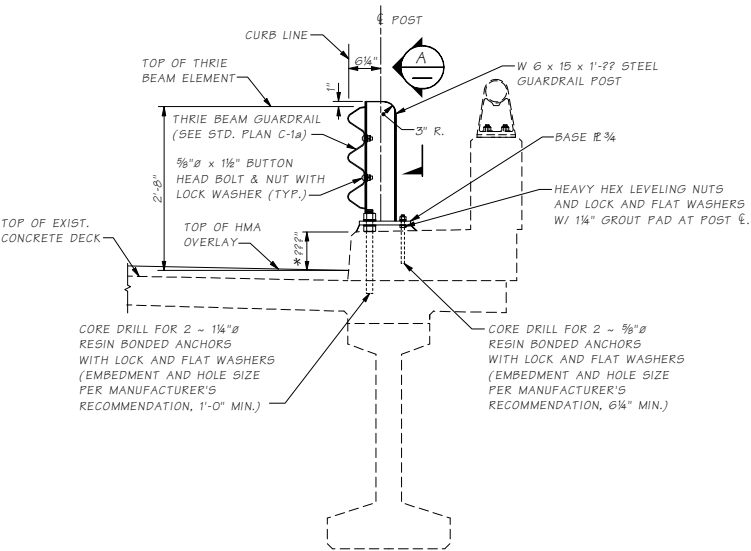
Bridge Design Engr.	M:\STANDARDS\Traffic Barriers\Rail Retrofit\PARAPET STANDARD.MAN	WORK NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor		10	WASH.			
Designed By						
Checked By						
Detailed By						
Bridge Projects Engr.						
Prelim Plan By						
Architect/Specialet	DATE	REVISION	BY	APPD		

BRIDGE
AND
STRUCTURES
OFFICE



THRIE BEAM RETROFIT
CONCRETE RAILBASE

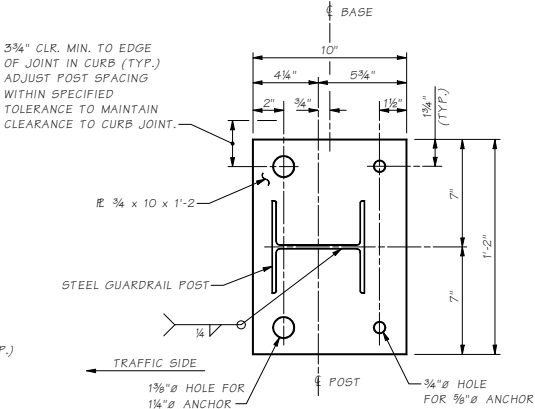
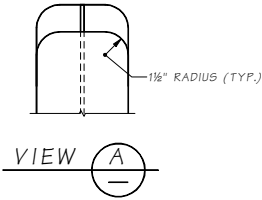
BRIDGE SHEET NO.
SHEET
OF
SHEETS



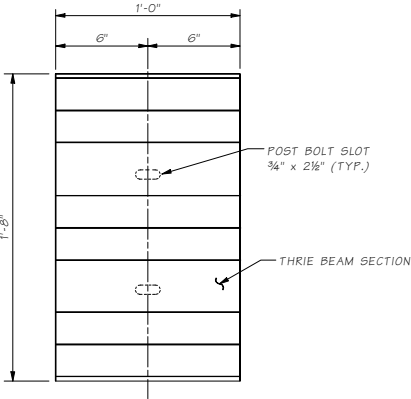
TYPICAL STEEL POST ANCHORAGE

?? POSTS REQUIRED

* SEE GENERAL NOTE NO. 5 ON BRIDGE SHEET NO. 1.

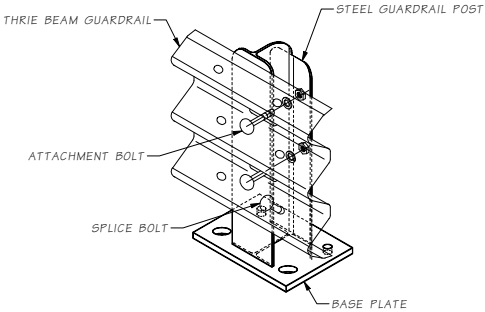


BASE PLATE DETAIL



BACKUP PLATE

BACKUP PLATE REQUIRED AT POST WHERE NO THRIE BEAM GUARDRAIL SPLICE OCCURS.



ISOMETRIC VIEW

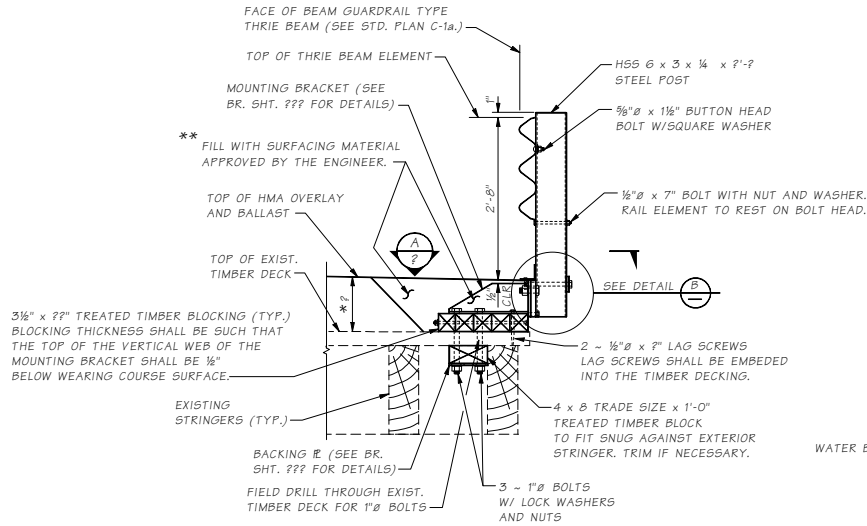
SR	JOB NO.	Bridge Design Engr.	M:\STANDARDS\Traffic Barriers\Rail Retrofit\STEEL POST STANDARD.MAN										FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
		Supervisor														
		Designed By														
		Checked By														
		Detailed By														
		Bridge Projects Engr.														

BRIDGE
AND
STRUCTURES
OFFICE



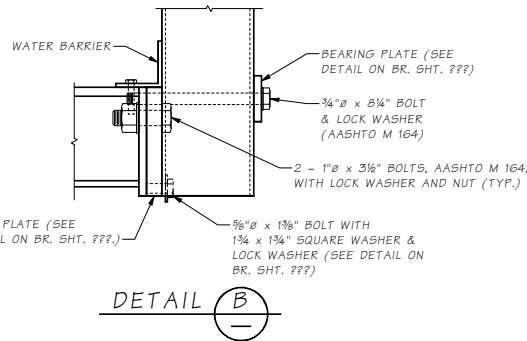
THRIE BEAM RETROFIT
CONCRETE CURB

BRIDGE SHEET NO.
SHEET
OF
SHEETS

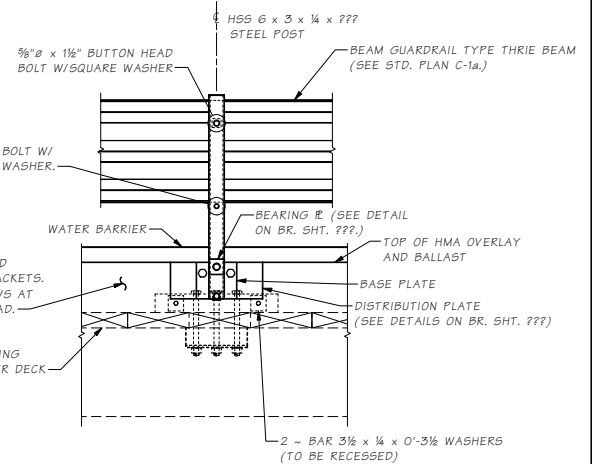


**GUARDRAIL POST
ASSEMBLY**
(??? ASSEMBLIES)

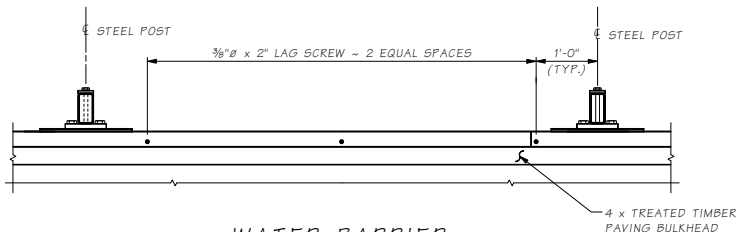
** THICKNESS OF SURFACING MATERIAL SHALL BE SUCH THAT THE TOP OF THE VERTICAL WEB OF THE MOUNTING BRACKET SHALL BE 1/8" BELOW WEARING COURSE SURFACE.



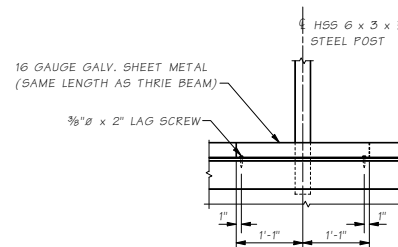
DETAIL (B)



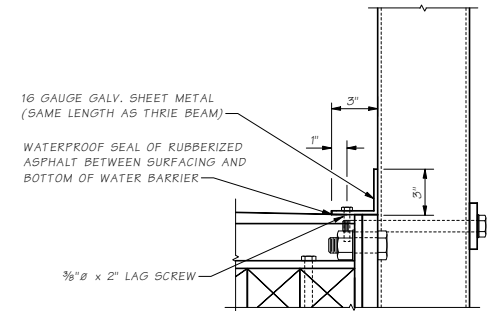
**OUTSIDE ELEVATION AT
TYPICAL GUARDRAIL POST**



**WATER BARRIER
PLAN**



**WATER BARRIER
SPLICE DETAIL**



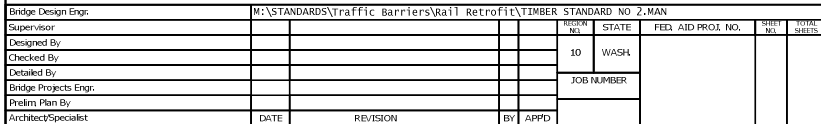
**WATER BARRIER
DETAIL**

BRIDGE
AND
STRUCTURES
OFFICE



WP THRIE BEAM RETROFIT
SL1 - DETAILS 1 OF 2

Bridge Design Engr.	M:\STANDARDS\Traffic Barriers\Rail Retrofit\TIMBER STANDARD NO. 1.MAN	WORK NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor		10	WASH.			
Designed By						
Checked By						
Detailed By						
Bridge Projects Engr.						
Prelim Plan By						
Architect/Specialet						
DATE	REVISION	BY	APPD			

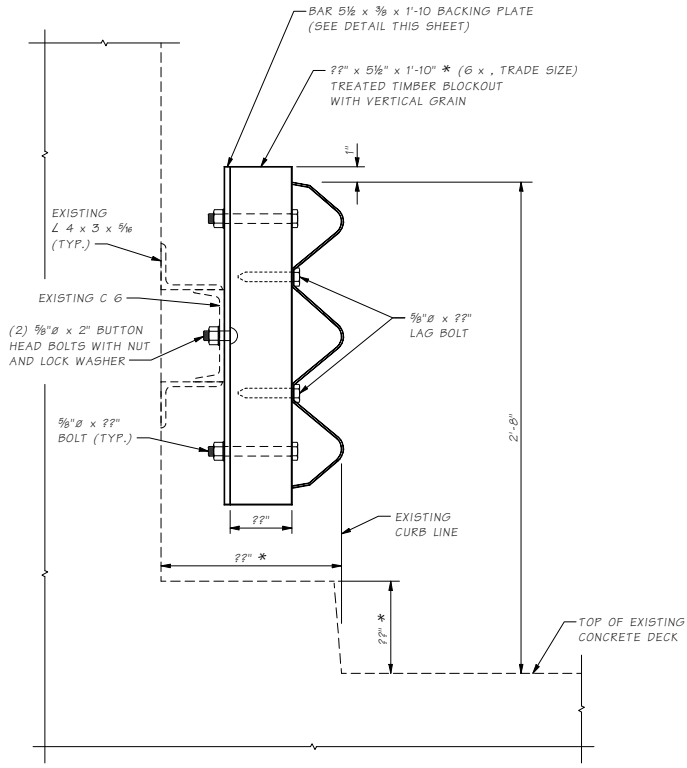


BRIDGE
AND
STRUCTURES
OFFICE

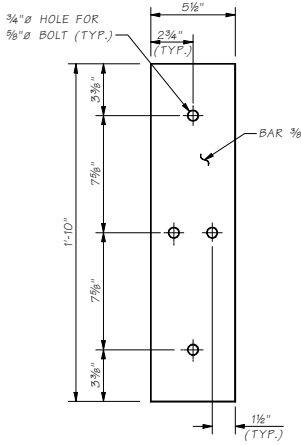


**Washington State
Department of Transportation**

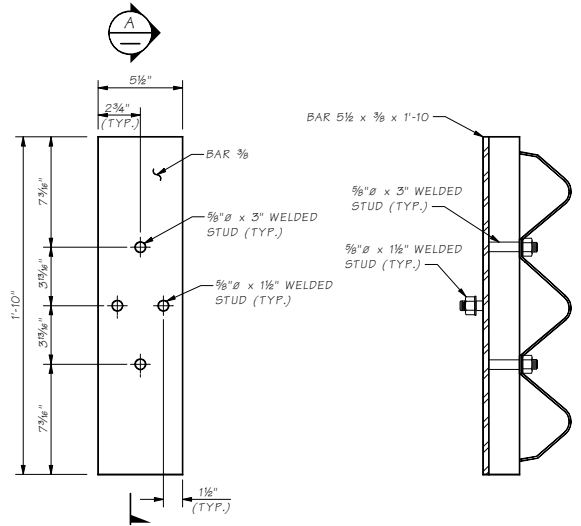
WP THRIE BEAM RETROFIT
SL1 - DETAILS 2 OF 2



STEEL TRUSS ANCHORAGE DETAIL
194 ASSEMBLIES REQUIRED



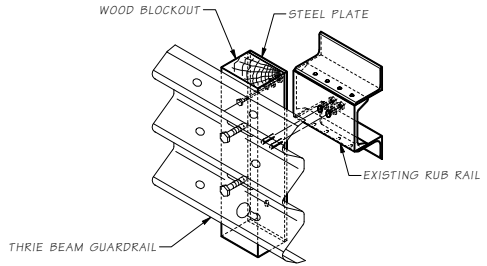
BACKING PLATE
?? ASSEMBLIES REQUIRED



MODIFIED BACKING PLATE
?? ASSEMBLIES REQUIRED

DESIGNER, USE THIS DETAIL WHEN THE TIMBER BLOCKING IS LESS THAN 2 1/2"

SECTION A



ISOMETRIC VIEW

* SEE GENERAL NOTE NO. 5 ON BRIDGE SHEET NO. 1.

SR JOB NO. 10.4-A5-1 SHEET 0

Bridge Design Engr.	M:\STANDARDS\Traffic Barriers\Rail Retrofit\TRUSS CONNECTION.MAN	THICKNESS	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor		10	WASH.			
Designed By						
Checked By						
Detailed By						
Bridge Projects Engr.						
Prelim Plan By						
Architect/Specialist	DATE	REVISION	BY	APPD		

BRIDGE
AND
STRUCTURES
OFFICE



COLLISION RAIL CONNECTION

BRIDGE SHEET NO.
SHEET
OF
SHEETS